1986 Pittsburgh Conference
Program Page 53

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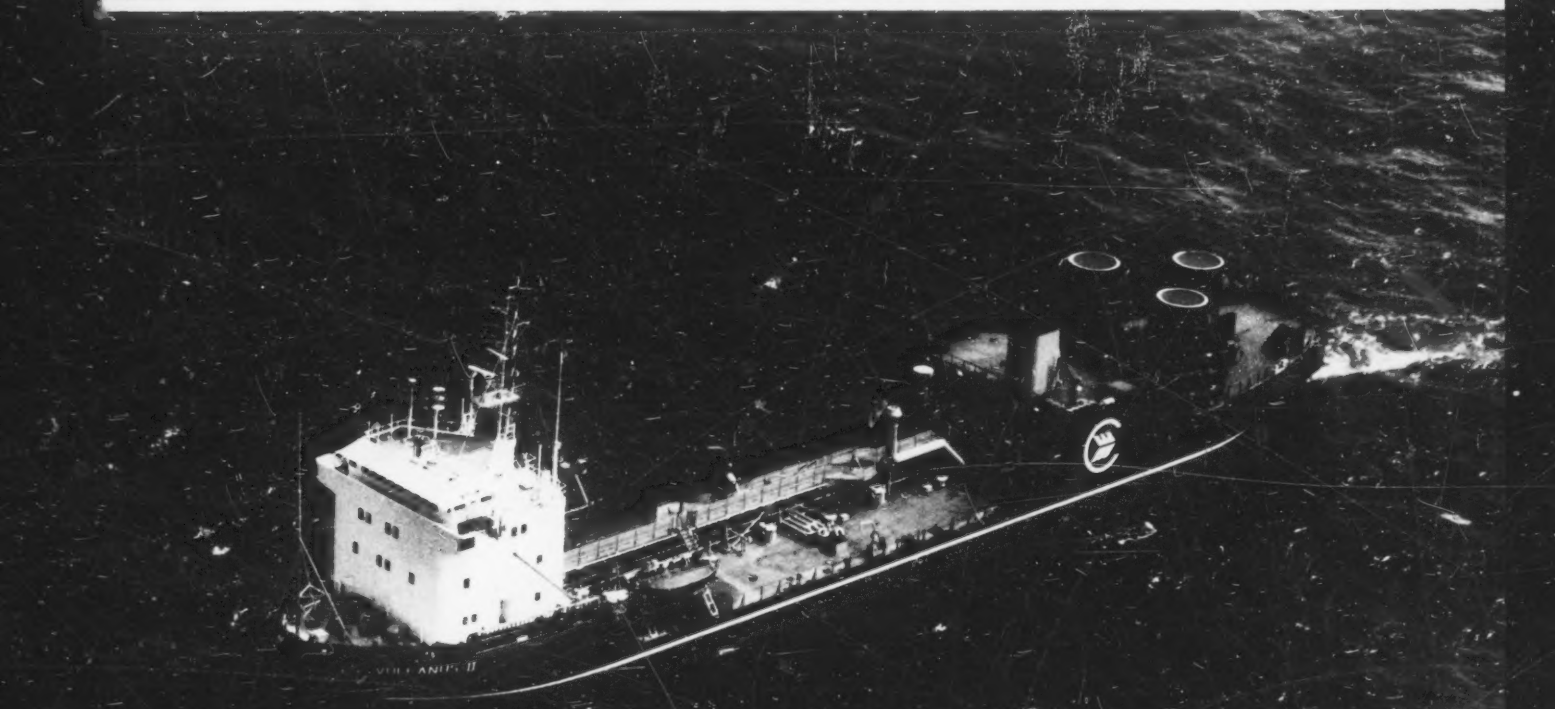
DECEMBER 9, 1985
CHEMICAL & ENGINEERING

NEWS



OCEAN INCINERATION

Adrift in sea of controversy
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Special Report

Technology for ocean incineration of hazardous wastes is available but commercial operators, facing opposition of environmental activists, must await EPA regulations. **Page 24**

BENZENE, FORMALDEHYDE: Workplace exposure limits proposed

A logjam appears to have broken at the Occupational Safety & Health Administration. Last week the agency issued two new proposed standards for workplace exposure to benzene and formaldehyde. In the eight years since President Reagan took office, it has issued only five health-related standards.

For benzene, OSHA once again has proposed a permissible exposure limit of 1 ppm in air averaged over eight hours and an action level of 5 ppm. If workplace exposure is below the action level, employers do not have to meet the standard's proposed requirements for installation of engineering controls, provision of protective clothing and equipment, monitoring, or medical surveillance.

The four principal industrial sectors covered by the standard are petrochemicals, petroleum refining, coke and coal chemicals, and tire manufacturers. The agency estimates that some 270,000 workers are exposed to benzene and says that at the current 10-ppm exposure level, the chemical presents a risk of 44 to 156 excess deaths per 1000 employees. The proposed 1-ppm level is expected to reduce this risk about 90%. As a result, an estimated 822 lives would be saved over a working lifetime.

That estimate appears to meet the test set forth in a 1980 Supreme Court decision that overturned OSHA's first, 1978 attempt to lower benzene exposure to 1 ppm. In its decision, the court said the agency had to prove, based on substantial evidence, that exposure to a chemical poses a significant risk of substantial health impairment before acting to lower exposure to that chemical. Neither the Chemical Manufacturers Association nor the American Petroleum Institute, which were parties to the suit that resulted in the overturn of the first standard, was prepared to comment on the new one at press time.

OSHA says that because there is substantial controversy over formaldehyde's potential carcinogenicity to humans—the compound has been shown to cause nasal carcinomas in rats—it has proposed two regulatory alternatives. Under one, formaldehyde would be treated as a carcinogen. The exposure level would be lowered from the current 3 ppm to 1 ppm with an action level of 0.5 ppm with other requirements similar to those proposed for benzene.

Alternatively, the agency says it might simply lower the exposure level to 1.5 ppm if the record developed during the rule-making procedure indicates that the primary health concern is mucous membrane irritation and sensitization. OSHA estimates that some 1.3 million workers are exposed to formaldehyde. But fewer than half are exposed to levels above 0.5 ppm and even fewer, primarily in the wood finishing, plastics, and synthetic resins industries, to levels above 1.0 ppm.

Ronald Lang of the Synthetic Organic Chemical Manufacturers Association says he is in general agreement with the approach OSHA is taking toward regulating formaldehyde in that it is looking at the most probable risk numbers rather than the worst-case scenario, as most federal agencies have done in the past.

However, labor unions that had sued the agency to force issuance of both standards, although pleased that the agency finally has done something, are very concerned because neither proposed standard contains the limits on short-term exposure levels that are present in the current standards for both chemicals. That means, they contend, that workers could be exposed to potentially lethal levels of the chemicals for short periods of time without any law's being violated.

OSHA had been ordered by the U.S. Court of Appeals for the District of Columbia to propose the formaldehyde standard by Dec. 3—it just met that deadline. And the agency was to appear in federal appeals court on Dec. 11 in a suit by the United Steel Workers seeking issuance of the benzene standard. Separate public hearings on both proposed standards, which likely will be published in the *Federal Register* this month, are expected to begin next March. □

OSHA has one proposal for benzene . . .

Exposure limit	
Current	10.0 ppm
Proposed	1.0 ppm
Action level	0.5 ppm
Workers exposed	270,000
Annual cost	$29 million

. . . but two options for formaldehyde

Exposure limit	
Current	3.0 ppm
Proposed	
Carcinogen	1.0 ppm
Irritant	1.5 ppm
Action level	
Carcinogen	0.5 ppm
Irritant	0.75 ppm
Workers exposed	1.3 million
Costs	
Carcinogen	
Capital	$57.8 million
Annual	$28.3 million
Irritant	
Capital	$38.9 million
Annual	$17.0 million

U.S. Drug Firms' Profits Rose Strongly in Third Quarter

Helping bolster bottom line of companies, most of which rely heavily on sales abroad, are weaker U.S. dollar and continued cost controls

David Webber, C&EN New York

U.S. pharmaceutical companies, most of which sell a large percentage of their products abroad, for the past few years have attributed the moderate nature of their growth to the high value of the dollar. With regularity in recent quarters, solid sales increases when measured in local foreign currencies have shown up as small gains or even declines when translated into dollars. Now, the dollar has weakened a bit. At the same time, rigorous cost control measures implemented over the past two years continue to pay off.

As a result, composite net income of a group of 16 major drug firms rose 13% in the third quarter compared with the same span a year earlier, the first time in five consecutive quarters they have turned in overall earnings growth in the double-digit range. Sales for the group rose a composite 5%, the highest gain in five quarters. And profitability (after-tax earnings as a percentage of sales), which has been growing steadily, climbed in the third quarter to 12.3% from 11.4% in third-quarter 1984.

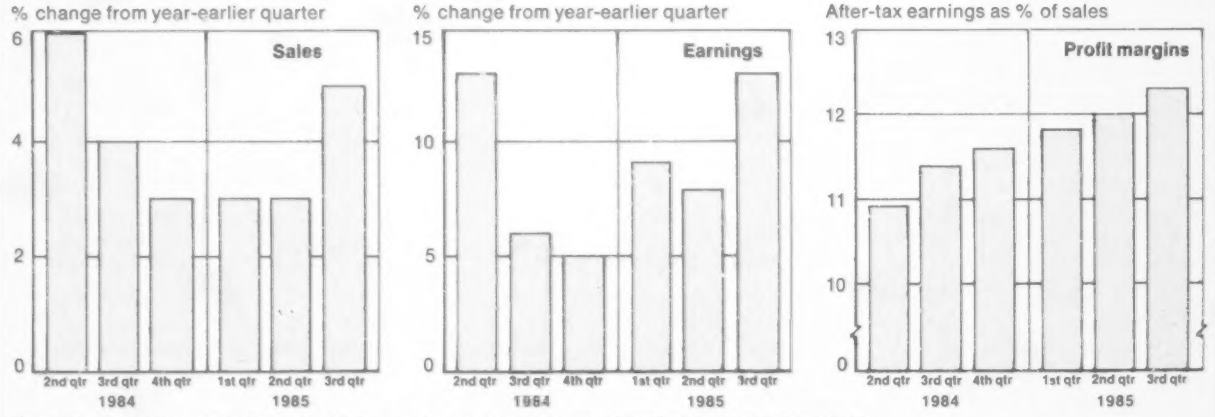
The scale of earnings growth varied greatly throughout the group, but every firm except Avon Products, with a 16% decline, and Sterling Drug, with no change in net income, recorded an increase in the quarter. It was a good period, for example, for Upjohn, which raised its earnings 49% from the year-earlier quarter on a 9% sales increase. Pacing the gain was the company's human health care products and services sector, for which sales rose 10%. Agricultural sales were lifted 4% by strong seeds performance, which offset flat animal health products and sharply lower feed additive sales. Also in the third quarter, Upjohn completed the sale of its polymer chemical business to Dow Chemical. The deal not only provided Upjohn cash to retire some short-term debt but eliminated an operation that lost nearly $4 million after taxes in third-quarter 1984.

Becton Dickinson posted a 30% increase in net income on a 4% sales gain, leading the company to boost its quarterly common stock dividend 10% to 33 cents per share. Sales growth of 5% by the company's health care segment was partly offset by a 4% decline in the industrial safety products operation. The earnings exceeded the company's own expectations, largely the result of improved gross profit margins and better operating expense ratios.

"Overall, we are pleased with the results," says chief executive Wesley J. Howe. "Although our emphasis on expense reduction will continue, we are now giving increasing attention to sales growth."

Merck recorded a 13% jump in earnings despite flat sales in the quarter. But sales were flat largely because the company earlier this year divested Calgon Carbon and

Pharmaceutical industry 1985 third-quarter results



Note: All sales, earnings, and profit-margin statistics are based on combined results of the 16 companies listed on page 10.

Pharmaceutical profitability improved in third quarter

	THIRD-QUARTER 1985						NINE-MONTHS 1985					
	Sales	Earnings[a]	Change from 1984		Profit margin[b]		Sales	Earnings[a]	Change from 1984		Profit margin[b]	
	($ millions)		Sales	Earnings	1985	1984	($ millions)		Sales	Earnings	1985	1984
Abbott Labs	$ 822.7	$106.7	13%	17%	13.0%	12.5%	$2405.9	$323.9	7%	16%	13.5%	12.4%
American Home Products	1210.3	185.4	4	7	15.3	14.8	3530.8	533.4	4	9	15.1	14.5
Avon Products	707.0	25.4	−5	−16	3.6	4.1	2102.9	89.0	−8	−18	4.2	4.7
Baxter Travenol Labs	519.1	47.0	11	18	9.1	8.5	1516.3	129.4	13	6	8.5	9.1
Becton Dickinson	315.9	28.9	4	30	9.1	7.3	1089.3	91.2	11	25	8.4	7.4
Bristol-Myers	1172.5	149.9	10	12	12.8	12.6	3334.7	400.5	5	13	12.0	11.2
Lilly	787.9	122.1	11	9	15.5	15.7	2453.6	393.1	5	6	16.0	16.0
Merck	855.8	136.1	0	13	15.9	14.1	2589.5	405.5	0	7	15.7	14.5
Pfizer	1012.8	155.5	2	16	15.4	13.5	2966.6	440.4	2	16	14.8	13.1
A. H. Robins	189.0	17.8	20	8800	9.4	0.1	520.1	44.6	12	121	8.6	4.3
Schering-Plough	472.1	43.4	2	13	9.2	8.3	1438.7	149.3	1	7	10.4	9.8
SmithKline Beckman	820.7	131.6	9	2	16.0	17.2	2361.3	384.8	8	1	16.3	17.4
Squibb	522.7	72.5	6	14	13.9	12.9	1450.4	167.1	6	13	11.5	10.8
Sterling Drug	486.0	45.4	2	0	9.3	9.5	1355.4	110.4	−1	2	8.1	7.9
Upjohn	474.7	45.7	9	49	9.6	7.1	1494.3	152.9	4	5	10.2	10.1
Warner-Lambert	828.9	60.9	4	8	7.3	7.1	2434.4	187.6	3	9	7.7	7.3

a Excludes significant extraordinary and nonrecurring items. b After-tax earnings as a percentage of sales. **Note:** G. D. Searle & Co. formally merged into Monsanto Oct. 1, 1985, and has been removed from the list.

Baltimore Aircoil. "An improved product mix, the continuation of aggressive cost controls, and productivity improvements contributed to the income gains," says P. Roy Vagelos, chief executive of the company.

SmithKline Beckman, on the other hand, posted a net income gain of just 2% on a sales increase of 9% during the third quarter. In the therapeutics area, sales of its ethical pharmaceutical products segment increased 5% to $399 million, and sales for eye and skin care products jumped 27% to $74 million. But sales were nearly even with the year-earlier period for both consumer and animal health care products, leaving the entire therapeutics area with a 7% sales rise. The diagnostic/analytical area reported a sales gain of 16%, paced by a 57% jump in sales of clinical laboratory services.

Just before Thanksgiving, the company announced that in a cost-cutting measure it was offering special early retirement incentives to about 700 employees. "The program is part of our effort to adjust our operations so that we can continue to compete successfully in a changing and challenging marketplace," explains Henry Wendt, chief executive officer of SmithKline Beckman.

Even more drastic action to cut costs is being taken by Warner-Lambert, which recorded an 8% earnings increase on a 4% rise in sales in third-quarter 1985. To shave $30 million off worldwide costs, the company is, at a charge of $550 million against fourth-quarter earnings, offering special early retirement incentives, putting all its health technologies businesses on the block, and consolidating other selected operations. The divestitures will allow the firm to concentrate on its activities in pharmaceuticals and consumer products.

In the third quarter, sales for Warner-Lambert's health care technologies businesses—which contribute only about 1% to annual earnings—mostly declined. On the other hand, sales of pharmaceuticals through the Parke-Davis unit increased 17%, and sales of nonprescription drugs climbed 15%.

Avon's 16% earnings slump was caused by the continued poor performance of its beauty business. The decline more than offset improved operating results in the firm's other divisions: Mallinckrodt, Foster Medical, and Direct Response. "The Avon division's U.S. strategies are about three months behind where we wanted them to be," concedes chief executive Hicks B. Waldron.

At Baxter Travenol Laboratories, third-quarter net income jumped 18% on an 11% sales increase despite lower average selling prices for the company's products. "Our operating performance continues to meet expectations," says Vernon R. Loucks Jr., president and chief executive officer of the company. "Results for the third quarter reflect positive contributions from practically every area of the company. We are encouraged by the progress we are making despite the continued cost containment efforts of health care payers, which are resulting in lower levels of hospital activities."

Continuing its run of strong quarters, Abbott Laboratories reported record results: Earnings rose 17% on a sales increase of 13%. Chief executive officer Robert A. Schoellhorn attributes the improved earnings to higher volume, continued productivity increases, improved product mix, and a lower tax rate.

"Our performance further confirms something we have pointed out for many years—that there are major advantages to our diversification within health care," he says. "Equally important to our success is that Abbott's broad range of products and services help health care providers meet the growing challenges of cost containment." □